

- MALLON, D.P. (1991): Status and Conservation of Large Mammals in Ladakh. *Biol. Conserv.* 56: 101-119.
- MANI, M.S. (1974): Ecology and Biogeography in India. Dr. W. Junk Publishers, Hague, the Netherlands.
- MISHRA, C., A. DATTA & M.D. MADHUSUDAN (2005): Record of the Chinese Goral *Naemorhedus caudatus* in Arunachal Pradesh. *J. Bombay Nat. Hist. Soc.* 102(2): 225-228.
- MISHRA, C., M.D. MADHUSUDAN & A. DATTA (IN PRESS): Mammals of the high-altitudes of western Arunachal Pradesh, Eastern Himalaya: an assessment of threats and conservation needs. *Oryx* in press.
- MITCHELL, R.M. (1977): Accounts of Nepalese mammals and analysis of host parasite data by computer techniques. Ph.D. dissertation, Iowa State University.
- PFISTER, O. (2004): Birds and Mammals of Ladakh. Oxford University Press, New Delhi, India.
- PIAO, R. (1989): Surveying the abundance of Tibetan Sand Fox in Tibet. *Chinese Wildlife* 6: 22-26 (In Chinese).
- POSTANOVICZ, R. (1997): Tibetan Fox (*Vulpes ferrilata*). <http://www.Lioncrusher.com/animal.asp?animal=34> (Accessed March 23, 2005).
- SCHALLER, G.B. (1998): Wildlife of the Tibetan steppe. Chicago University Press, Chicago, USA.
- SCHALLER, G.B. & J.R. GINSBERG (2004): Tibetan Fox *Vulpes ferrilata*. Pp. 148-151. *In: Canids: Foxes, Wolves, Jackals and Dogs*. IUCN/SSC Canid Specialist Group, Gland, Switzerland.
- SINHA, A., A. DATTA, M.D. MADHUSUDAN & C. MISHRA (IN PRESS): The Arunachal macaque *Macaca munzala*: a new species from western Arunachal Pradesh, northeastern India. *Intl. J. Primatol.*
- STOCKLEY, G. (1936): Stalking in the Himalayas and Northern India. Herbert Jenkins, London.

2. DOMESTIC DOG (*CANIS FAMILIARIS*): THREAT FOR THE GOLDEN LANGUR *TRACHYPITHECUS GEEI*

Primates are sensitive to the risk of predation (Dunbar 1988), and both actual predation and the risk of predation influence the behavioural strategies of the species. Primates often fall prey to predators, especially carnivorous mammals and birds.

The Dog (*Canis familiaris*) is one of the earliest domesticated animals. It is the most common domestic animal in the villages adjoining the forests in Assam. This poses a threat to the wildlife.

The Golden Langur (*Trachypithecus geei*) is a restricted range species, its distribution in India being confined to a forest belt between river Manas in the east, Sankosh in the west and, Brahmaputra in the south in the Indo-Bhutan Border. Many populations of Golden Langur now live in forests adjoining human settlements. They are compelled to move on the ground due to the canopy gaps, where they are vulnerable to attack by dogs.

A socio-ecological study of the Golden Langur was carried out in Chakrashila Wildlife Sanctuary in Dhubri district of Assam during 2001-2002. In this study, several aggressive encounters between the domestic dog and the Golden Langur were observed. The death of an adult male and an adult female of the same troop, due to predation by domestic dog, occurred in Jomagara, a village on the fringe of the Chakrashila Wildlife Sanctuary, on January 6 and on February 12, 2002. The villagers reported a few killings of Golden Langur by domestic dogs in the same area. Observations of aggressive encounters between a semi-provisioned group of Golden Langurs and domestic dogs in Umananda River Island in Guwahati during a long-term study also support this view (Medhi 2002).

The villagers use dogs to chase away the monkeys to prevent crop raiding. A survey in the fringe villages of Chakrashila Wildlife Sanctuary revealed that every year 3-4 Rhesus Macaques (*Macaca mulatta*) also fall prey to dogs.

These incidences show the emergence of both domestic and stray dogs as a threat to primates in general, and the Golden Langur in particular.

ACKNOWLEDGEMENT

We gratefully acknowledge the support from Primate Conservation Inc.

April 16, 2003

DILIP CHETRY^{1,2,3}

REKHA MEDHI^{1,2}

P.C. BHATTACHARJEE^{1,2}

¹Animal Ecology and Wildlife Biology Lab.

Department of Zoology,

Gauhati University,

Guwahati, Assam 781 014, India.

²Primate Research Centre,

Northeast India, P.O. Box. 152,

Guwahati, Assam 781 001, India.

³Email: chetryd@rediffmail.com

B.N. PATIRI

Divisional Forest Office,

Wildlife Division, Kokrajhar,

Govt. of Assam, Assam, India.

REFERENCES

- DUNBAR, R.I.M. (1988): *Primate Social System*. Cornell University Press, Ithaca, New York.
- MEDHI, R. (2002): Behaviour of Golden Langur *Trachypitecus geei* (Khajuria 1956), in a riverine island. Ph.D. dissertation (Unpublished), Gauhati University, Assam, India.

3. AN UPDATE ON THE ELEPHANTS OF INTERVIEW ISLAND

Introduction

Elephants were brought over to the Andaman Islands for forestry operations. One such forestry operation was carried out on Interview Island, west of Mayabunder on Middle Andaman Island. Since the company carrying out the operation went bankrupt, the elephants being used were released on the island in 1962. Approximately 40 elephants were released then (Sivaganesan 1993).

Elephants are not normally found in the Andamans. Interview Island is predominantly evergreen and semi-evergreen forest and has an area of 133.87 sq. km (Fig. 1)

according to the Forest Department (Anon 1998). However, this calculation is based on the low tide line; the area under vegetation is around 105 sq. km. A percentage of this is under mangrove, which is not used by elephants. Sivaganesan and Kumar (1995) estimated the available habitat for elephants to be around 70 sq. km.

In 1992, Sivaganesan and Kumar (1995) conducted a census of these elephants using dung counts. The numbers estimated were around 70 animals. This indicates a phenomenal growth in population. Considerable damage to the vegetation was recorded during this study, raising concerns about the future of this population. I therefore carried out another survey in 2001.

Local information gathered in December 2000 indicated that elephants were found in herds of 5-10 individuals (Andrews, pers. comm.). It was established that their movements over the island was highly seasonal, with certain areas being preferred at certain times of the year. Their movements were also constrained by the proximity of water since there were limited perennial waterholes on the island. Nine major waterholes were identified on Interview Island, and the herds moved from waterhole to waterhole. *Machans* were therefore built in January near six of these waterholes.

The survey began on February 16 and continued until the end of March. There were 35 census days in this period. Only the days when new individuals were sighted have been shown in the tables. Because of the heavy rains preceding this period, it was found that observations from *machans* were not yielding much information (since water was available at many sites). Experienced trackers were then employed to quarter the forests, locate individual herds and follow them while trying to identify as many individuals as possible. It was expected that the rate of detection of new animals would level off as more and more were found: this did in fact happen. No new elephants were seen after the 17th day.

A check sheet with the frontal and lateral views of elephant was developed, where identifying features such as pale patches and scars were marked. The trackers were interviewed in-depth each day, and an understanding of elephant movement on the island during that period was gained.

Grid locations were not used, since at that time there was no accurate method of estimating precise locations on

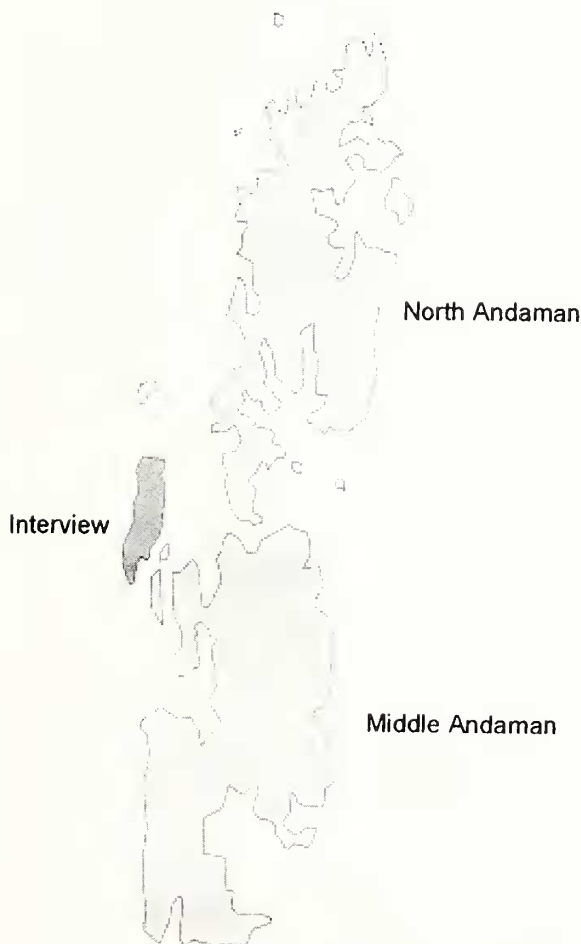


Fig. 1: Map of Northern part of Andaman Islands showing Interview Island